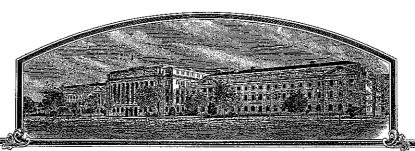
No.



9700301

## <u>THER UNITED SHATTES OF AMERICA</u>

TO ALL TO WHOM: THESE PRESENTS SHALL COME:

# Monsanto Jechnology IIG

MICCOS, THERE HAS BEEN PRESENTED TO THE

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

MOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPUBLISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR TING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

**SOYBEAN** 

'AG2501'

In Vestimonn Marrest, I have hereunto set my hand and caused the seal of the Plant Invite protection Office to be affixed at the City of Washington, D.C. this seventeenth day of April, in the year two thousand and six.

Attast:

Que Jahr Commissioner

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

f Agriculture

11.5 DEDARTMENT OF	A O DIOLU	7175		· · · · · · · · · · · · · · · · · · ·	i othi Approves - onio no, odg i-oddo		
U.S. DEPARTMENT OF AGRICULTURAL MARK	ETING SE	RVICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.				
SCIENCE AND TECHNOLOGY - PLANT  APPLICATION FOR PLANT VARIETY	PROTEC	TION CERTIFICATE	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).				
(Instructions and information collection	n burden st	tatement on reverse)					
Monsanto Technology LLC			2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME  3. VARIETY NAME				
		•	AGK25601		AG2501		
4. ADDRESS (Street and No., or R.F.D. No., City, State, a	ie, and Country)	TELEPHONE (include area code)		FOR OFFICIAL USE ONLY			
3302 S.E. Convenience Blvd.	·	(515) 963-4200	PVPO NUMBER				
P.O. Box 3010		6 EAY (include area code)	6. FAX (include area code) 0 0 9 7 0 0 6				
Ankeny, IA 50021			(515) 965-3001				
			(313) 903-3001	FIL	ING DATE		
<ol> <li>IF THE OWNER NAMED IS NOT A "PERSON". GIVE F ORGANIZATION (corporation, partnership, association.</li> </ol>		8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	5/28/190m			
,	cit.)	STATE OF INCORPORATION			DJ00/1777		
Limited Liability Company  10. NAME AND ADDRESS OF OWNER REPRESENTATION	VE(S) TO S	EDVE IN THIS ADDI ICATION (Eight	Parron listed will receive all annum	F	FILING AND EXAMINATION FEES:		
to this house of other head that	VE(0) 10 0	ERVE IN THIS APPEICATION: (FIRST)	oerson iisteo wiit receive ali papers)	Ε	\$ 2450.00		
Donald Steffen					E   * 0/400,00		
3302 S.E. Convenience Blvd.				R	DATE 5/27/1997		
P.O. Box 3010 Ankeny, IA 50021				E CERTIFICATION FEE:			
7 Mikeliy, 171 30021				E	\$		
			•	V	N' S		
			•	E	DATE		
11. TELEPHONE (Include area code)	12. FAX	(Include area code)	13. E-MAIL	14.	CROP KIND (Common Name)		
(515) 965-3022	(51	5) 965-3001	destef@monsanto.com		Soybean		
15. GENUS AND SPECIES NAME OF CROP			16. FAMILY NAME (Botanical)		IS THE VARIETY A FIRST GENERATION		
Glycine max (L.) Merr.			Fabaceae (Leguminosae)	HY	BRID?		
Glychic max (E.) Weit.			1 abaceae (Leguinnosae)		YES X NO		
<ol> <li>CHECK APPROPRIATE BOX FOR EACH ATTACHME reverse)</li> </ol>	NT SUBMIT	ITED (Follow instructions on			OF THIS VARIETY BE SOLD AS A CLASS OF the Plant Variety Protection Act)		
a. X Exhibit A. Origin and Breeding History of the	Variety		YES (If "yes", answer items 2		527		
b. Exhibit B. Statement of Distinctness			20. DOES THE OWNER SPECIFY THAT		F21		
c. X Exhibit C. Objective Description of Variety			VARIETY BE LIMITED AS TO NUMBE				
d. X Exhibit D. Additional Description of the Varie	ety (Optional	)	IF YES, WHICH CLASSES?   F	DUNDA	TION REGISTERED CERTIFIED		
e. Exhibit E. Statement of the Basis of the Own			21. DOES THE OWNER SPECIFY THAT	SEED	F THIS YES NO		
f. Voucher Sample (2,500 viable untreated seen verification that tissue culture will be deposite.			VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?  IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. FOR EACH CLASS.				
repository)			FOUNDATION REGISTE		CERTIFIED		
g. States" (Mail to the Plant Variety Protection C	payable to " Office)	Treasurer of the United			use the space indicated on the reverse.)		
22. HAS THE VARIETY (INCLUDING ANY HARVESTED N FROM THIS VARIETY BEEN SOLD, DISPOSED OF, T OTHER COUNTRIES?	/ATERIAL) RANSFER	OR A HYBRID PRODUCED (1975) RED, OR USED IN THE U. S. OR (1975)	23. IS THE VARIETY OR ANY COMPONE PROPERTY RIGHT (PLANT BREEDE		THE VARIETY PROTECTED BY INTELLECTUAL HT OR PATENT)?		
☐ YES <b>∑</b>			YES		. □ NO		
IF YES, YOU MUST PROVIDE THE DATE OF FIRST S FOR EACH COUNTRY AND THE CIRCUMSTANCES.	SALE, DISP Please us)	OSITION, TRANSFER, OR USE e space indicated on reverse.)	IF YES, PLEASE GIVE COUNTRY, DAT REFERENCE NUMBER. (Please use s	TE OF F	ILING OR ISSUANCE AND ASSIGNED ficated on reverse.)		
24. The owners declare that a viable sample of basic seed	of the varie	ty will be furnished with application an	nd will be replenished upon request in accordan	ice with	such regulations as may be applicable, or		
for a tuber propagated variety a tissue culture will be de	eposited in	a public repository and maintained for	r the duration of the certificate.		·		
The undersigned owner(s) is(are) the owner of this sext and is entitled to protection under the provisions of Sec	ually reprod tion 42 of th	luced or tuber propagated plant variety ne Plant Variety Protection Act.	y, and believe(s) that the variely is new, distinc	t, unifor	m, and stable as required in Section 42,		
Owner(s) is(are) informed that false representation here	ein can jeop	ardize protection and result in penaltic	es.				
SIGNATURE OF OWNER		SIGNATURE OF OWNER					
_ b tot Stiff_							
NAME (Please print or type)			NAME (Please print or type)				
Donald Steffen				<del></del>			
CAPACITY OR TITLE		DATE / - /2007	CAPACITY OR TITLE		DATE		
Oilseeds IP/Reg. Affairs Manag	er	5/15/1997					
ST-470 (02-10-03) designed by the Plant Variety Protection Office with Wo	ord 2000. Rep	laces former versions of ST-470, which are ob	osolete. (Se	e reverse	for instructions and information collection burden statement )		
at t					<b>1.</b>		

#### INSTRUCTIONS

9700301

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO)ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, (3) for a seedeproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to eproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense ti will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$652 (\$43 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applicat will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protecti Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated DO NOT use masking materials. to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$2 for issua of the certificate. Certificates will be issued to owne, not licensee or agent.

> Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/sciencepvpo/pvp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clone used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variats may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If new variety is most similar to one variety or a group of related arieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or plotographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as complete as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accuratelythe characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is availe from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed)the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

() E T (Z AY 14)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, ifhe variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

U.S. Patent No. 5,776,760. Issue Date: July 7, 1998. Assignee: Monsanto Company. Patent Application No. 484,274.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filling a change of ddress. The fee for filling a change of ownership or assignment of the application of the applica or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the ppropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultral Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability sexual orientation, marital or family significant political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice an TDD). USDA is an equal opportunity provider and employer.

### MONSANTO TECHNOLGY LLC PVP APPLICATION – AG2501

### **EXHIBIT A**

### ORIGIN AND BREEDING HISTORY

- 1993 Final cross was made in 1993 at Isabela, Puerto Rico.
  - Parentage: A2012/3/A1900//A2396/40-3-2

Source of glyphosate tolerance is 40-3-2.

- 1993 F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1994 F2 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1994 F3 bulk populations were grown at Isabela, Puerto Rico and single plants pulled.
- 1994 F3 derived F4 plants were grown at Kalamazoo, Michigan in progeny rows and variety AG2501 was selected based on visual appearance. Visual appearance selection is based upon uniformity for visual phenotype (i.e., flower color, pubescence color, hilum color, and polywall color), maturity uniformity and plant height uniformity among individual plants, and resistance to Roundup herbicide (sprayed with 32 oz./acre), if variety is a RoundupReady variety.
- 1995 F3:5 breeder seed was grown at Ames, Iowa for progeny row increase and in yield tests at 10 locations across the northern soybean belt.

Variety AG2501 was observed to be uniform and stable for the characteristics described within this application based on our observations since 1995 and, henceforth, to present. No variants were observed during this time.

Variety AG2501 has continued to be grown in yield tests at 15 locations in 1996 for comparison against other varieties to determine how it would be used in our marketing program.

### Monsanto Technology LLC (8T: 11/3/2004)

PVP APPLICATION AG2501 Soybean MAY, 1997

### EXHIBIT B Novelty Statement Concerning AG2501 Soybean

To our knowledge, the soybean varieties that closely resemble AG2501 are A2242, A1900, and A2396

Ł.	Pod wall color	AG2501 - Brown
		A2242 - Tan
	•	A1900 - Brown
		A2396 - Brown
2.	Tolerance to glyphosate herbicide	AG2501 - Present
	(RR <sup>TM</sup> gene)	A2242 - Absent
		A1900 - Absent
		A2396 - Absent
3,	Phytophthora resistance gene	AG2501 - Rps1k
		A1900 - Rpslk
		A2242 - Rps1k
		A2396 - Rpsla

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

# OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S)	Monsanto Technology LL	C	·	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or i	R.F.D. No., City, State, and ZIP Code)			-0 <b>09</b> 700301
	3302 S.E. Convenience Bl P.O. Box 3010	vd.		VARIETY NAME AG2501
	Ankeny, IA 50021			TEMPORARY OR EXPERIMENTAL DESIGNATION AGK25601
PLEASE READ ALL INS	FRUCTIONS CAREFULLY: Place the app	ropriate number that describ	es the varietal character of t	this variety in the boxes below.
Place a zero in the first box	a (e.g. 099 or 09 ) when num	ber is either 99 or less or 9 or	less respectively. Data for o	quantitative
plant characters should be	based on a minimum of 100 plants Compa	rative data should be determ	ined from varieties entered i	in the same trial. Royal
Horticultural Society or an	y recognized color standard may be used to	determine plant colors; desig	gnate system used:	
	for your variety; lack of response may dela	y progress of your application	n.	
A. MORPHOLOG	Υ .	*		
Seed Shape:				
3 = Elo	L/T, and $T/W$ ratios < 1.2)	(L/W ratio 4 = Elonga	cal-Flattened > 1.2; L/T ratio < te-Flattened > 1.2;T/W ratio >	•
Seed Coat Color:				
1 = Ye	llow 2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)
Seed Coat Luster:				
1 1 = Du	2 = Shiny			
Seed Size:				
1 6 . 0	grams/100 seeds			
H <u>ilum C</u> olor:				
5		3 = Brown e Specify)	4 = Gray	5 = Imperfect Black
Cotyledon Color:				
1   1 = Yel	low 2 = Green			

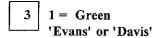
### A. MORPHOLOGY (Continued)

Seed Protein Peroxidase Activity:

$$1 = Low$$

$$2 = High$$

**Hypocotyl Color:** 



2 = Green with Bronze Bands below Cotyledon 'Woodworth' or 'Tracy'

3 = Light Purple below Cotyledons 'Beeson' or 'Pickett 71' 4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaf Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (*Please Specify*)

Flower Color:

2 = Purple

3 = White with a Purple Throat

Pod Color:

2 = Brown

3 = Black

Pubescence Color:

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

1 = Determinate

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

**Maturity Group:** 

1 = 0006 = III

2 = 007 = IV

3 = 08 = V

4 = I9 = VI

5 = II10 = VII

0 5 6 III 11 = VIII 7 = IV 12 = IX

8 = V13 = X

14 = XI

 $15 = X\Pi$ 

Maturity Subgroup:

Please enter a value from 0 - 9

#### B. DISEASE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant 3 = Tolerant

**Bacterial** 



Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)



Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)



Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

0

Brown Spot (Septoria glycines Hemmi)

<b>D.</b> 1	MOLITOL REAL	2110115 (Continue	u – Not Teste	u 1 – 3	usceptible 2 - Resist	.апс 3— 1	OICI AIIL
	Frogeye Lea	f Spot ( <i>Cercospore</i>	a sojina Hara)				
0	race 1		0 race 2		0 race 3	0	race 4
0	race 5		0 race 6		Other (Please Spec	ify)	
0	Target Spot	(Corynespora cass	iicola (Berk. & Curt.)	Wei)			
0	Downey Mile	lew ( <i>Peronospora</i>	trifoliorum var. mand	<i>churica</i> (Naur	n.) Syd. ex Gäum)		
0	Powdery Mil	dew ( <i>Microsphaei</i>	ra diffusa Cke. & Pk.)				
1	Brown Stem	Rot ( <i>Phialophora</i>	gregata (Allington &	Chamberlain	) W. Gams.)		
0	Stem Canker	(Diaporthe phase	colorum (Cke. & Ell.)	Sacc. var. <i>ca</i> .	ulivora Athow & Caldwe	ll)	
0	Pod and Sten	ı Blight ( <i>Diaporth</i>	e phaseolorum (Cke.	& Ell.) Sacc.	var. <i>sojae</i> (Lehman) Wel	am.)	
0	Purple Seed S	Stain ( <i>Cercospora</i>	kikuchii (T. Matsu. &	z Tomoyasu)	Gardener)		
0	Rhizoctonia I	Root Rot (Rhizocte	onia solani Kühn)				
Phyto	phthora Root R	ot ( <i>Phytophthora</i> )	megasperma Drechs. f	. sp. <i>glycinea</i>	(Kuan & Erwin))		
2	race 1	2 race 8	2 race 15	2 rac	ce 22		
2	race 2	2 race 9	1 race 16	2 rac	ee 23		
2	race 3	2 race 10	2 race 17		ee 24		
2	race 4	2 race 11	2 race 18	1 rac	ee 25		
2	race 5	1 race 12	1 race 19	2 rac	ee 26		
2	race 6	2 race 13	1 race 20	Ot	her ( <i>Please Specify</i> ):		
2	race 7	2 race 14	2 race 21				
0	Bud Blight (T	obacco Ringspot	Virus)				
0	Yellow Mosaid	c (Bean Yellow M	losaic Virus)				
0	Cowpea Mosa	ic (Cowpea Chlor	rotic Virus)				
0	Pod Mottle (B	ean Pod Mottle V	<sup>/</sup> irus)		·		

B. D	ISEASE REACTION	NS (Continue	d) $0 = Not Te$	sted 1 = Susceptible	0097 2 = Resistant	90301
0	Seed Mottle (Soyb	ean Mosaic V	Virus)	-		
Nema	tode					
Soybe	an Cyst Nematode (A	Heterodera gly	vcines Ichinohe)			
0	race 1	0 race 4	0	race 9		
0	race 2	0 race 5	1	race 14 (former r. 4)		
1	race 3	0 race 6		Other (Please Specify)		
0	Lance Nematode (	Hoplolaimus	columbus Sher)			
0	Southern Root Kn	ot Nematode	(Meloidogyne inco	gnita (Kofoid & White) Cl	hitwood)	
0	Northern Root Kn	ot Nematode	(Meloidogyne hapi	a Chitwood)		
0	Peanut Root Knot	Nematode (A	Aeloidogyne arenar	ia (Neal) Chitwood)		
0	Reniform Nematod	de ( <i>Rotylench</i>	us reniformus Linv	vood & Olivera)		
0	Javanese Nematodo	e (Meloidogyi	ne javanica (Treub	) Chitwood)		
	Other Nematode (I	Please Specify	·)			
C. PF	IYSIOLOGICAL RE	ESPONSES	0 = Not Tes	ted 1 = Susceptible	2 = Resistant	3 = Tolerant
3	Iron Chlorosis on C	Calcareous So	oil			
0	Phosphorus					
0	Boron					
0	Aluminum				·	
0	Salt					
0	Drought					

1			009700	301
D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant  3 = Te	olerant
Mexican Bean Beetle (Epilachna	<i>varivestis</i> Mulsant)			
O Potato Leaf Hopper (Empoasca fo	abae (Harris))			÷
Other (Please Specify)				
E. HERBICIDE REACTIONS	0 - Not Tested	1 = Susceptible	2 = Resistant	
2 Metribuzin				
0 Bentazone			·	
1 Sulfonylurea				
2 Glyphosate				
1 Glufosinate				
0 Pendimethalin				
Other (Please Specify)				
F. TRANSGENIC COMPOSITION				
Has the development of the Subject Variet If yes, please complete the following informal. Please state the vector's name: 2. Please state the vector components: 3. Please describe the genetic material subjects.	mation requests*. Use	additional pages if n	ecessary.	NO NO
4. Please describe the insertion protocol:				
* A literature citation(s) explaining the the "Transgenic Composition" portion		ests above may be an	acceptable alternative to o	completion of

U.S. Patent No. 5,776,760. Issue Date: July 7, 1998. Inventor: Barry, Gerard, and Kishore, Ganesh. Assignee: Monsanto Company. Patent Application No. 484,274.

ABSTRACT: Genes encoding a glyphosate oxidoreductase enzyme are disclosed. The genes are useful in producing transformed bacteria and plants which degrade glyphosate herbicide as well as crop plants which are tolerant to glyphosate herbicide.

	NO. OF DAYS MATURITY		CM PLANT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO. SEEDS/
VARIETY			HEIGHT	CM Width	CM Langth	% Protein	N Oil	SEEDS	200
AG2501 Submitted	129	1.3	76.2					16.3	
A2242 Name of Similar Variety	128	1.5	77.7	_				15.1	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses, Amer. Soc. Agron, Monograph No. 16.
- 2. Suttery, S.R. and R.I. Suzzell, 1963. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8t 772-725.
- 3. Hymowrtz, T. 1973. Electrochoretic analysis of SBTI-Ag in the USDA soybean germolasm collection. Crod Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

### G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

### H. COMMENTS

Monsanto Technology LLC (BT: 11/3/2004)

PVP APPLICATION AG2501 Soybean MAY, 1997

### EXHIBIT D Additional Description of AG2501 Soybean

AG2501 is a mid maturity group II variety with resistance to Roundup to herbicide. It has comparable yields to lines of similar maturity and has excellent tolerance to lodging. It is very broadly adapted but should do very well on soils which are prone to Phytophthora Root Rot as it has a major gene for Phytophthora resistance, Rps1k. It also has demonstrated above average tolerance to iron chlorosis.

REPRODUCE LOCALLY. Include form number and edition date on all reproduct	ions.	FORM APPROVED - OMB No. 0581-0055
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to det certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued	421). The information is held
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Monsanto Technology LLC	AGK25601	AG2501
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 3302 S.E. Convenience Blvd. P.O. Box 3010	5. TELEPHONE (Include area code) (515) 965-3022	6. FAX (Include area code) (515) 965-3001
Ankeny, IA 50021	7. PVPO NUMBER 0 0 9 7	00301
8. Does the applicant own all rights to the variety? Mark an "X" in the	ne appropriate block. If no, please exp	lain. YES NO
9. Is the applicant (individual or company) a U.S. National or a U.S.	based company? If no, give name of	country. YES NO
10. Is the applicant the original owner?	NO If no, please answer <u>one</u> o	f the following:
<ul> <li>a. If the original rights to variety were owned by individual(s), is YES</li> <li>b. If the original rights to variety were owned by a company(ies)</li> </ul>	NO If no, give name of country	y
	NO If no, give name of countr	
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the n	everse for extra space if needed):
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals o	•	•
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>		
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who did	rected the final breeding. See Section 4	41(a)(2) of the Plant Variety Protection

According to the Paperwork Reduction Act of 1995, an agency may no conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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